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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/777,915	02/05/2001	Robert R. Andrews	08261-017001	6193

26161 7590 06/15/2005

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EXAMINER

TRAN, BINH Q

ART UNIT PAPER NUMBER

3748

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	Application No. 09/777,915	Applicant(s) ANDREWS ET AL.	
	Examiner BINH Q. TRAN	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>08/04, 10/04, 04/05</u> | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This office action is in response to the amendment filed March 24, 2005.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

*Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brauer (Patent Number 5,951,543) in view of Eisel et al. (Eisel) (Patent Number 5,412,681).*

Regarding claims 1 and 6, Brauer discloses a cardiac laser surgery apparatus and method comprising: a sealed CO2 slab laser (e.g. 620), and a laser delivery system (e.g. See Figs. 5-6); wherein the laser providing pulses of adjustable length in time so as provide energy of between 8 and 10 Jules per pulse (e.g. See col. 10, lines 15-25); and the laser delivery system for delivering laser pulses from said laser to a patient's heart (e.g. See Figs. 5-6; col. 8, lines 65-67; cols. 9-10, lines 1-67). However he fails to disclose that the slab laser including two narrowly spaced electrodes having opposed planar surfaces and a rectangular discharge region defined between the opposed planar surfaces of the two narrowly spaced electrodes.

Eisel teaches that it is conventional in the art, to use a slab laser including two narrowly spaced electrodes having opposed planar surfaces and a rectangular discharge region defined

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between the opposed planar surfaces of the two narrowly spaced electrodes (e.g. See Abstract; Figs. 2-13; col. 5, lines 51-67; col. 6, lines 1-46).

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to use a slab laser including two narrowly spaced electrodes having opposed planar surfaces and a rectangular discharge region defined between the opposed planar surfaces of the two narrowly spaced electrodes of Brauer, as taught by Eisel for the purpose of delivering laser pulses to the CO2 slab laser device; so as to increase the power and efficiency of the laser slab device during laser surgery of the patient's heart.

Regarding claims 2 and 7, Brauer further discloses that the laser delivery system includes a hand piece for delivering pulses to the outside of a patient's heart to provide openings in the patient's heart for myocardial revascularization (e.g. See Figs. 5-6; col. 8, lines 65-67; cols. 9-10, lines 1-67).

Regarding claims 3 and 8, Brauer further discloses that the pulses are shorter than 100 ms (e.g. See Figs. 5-6; col. 10, lines 15-67; col. 11, lines 34-63).

Regarding claims 4 and 9, Brauer further discloses that the laser delivery system is synchronized to the heart beat to fire when the heart is electrically insensitive to reduce the chance of arrhythmia (e.g. See Figs. 5-6; col. 10, lines 15-67; col. 11, lines 34-63).

Regarding claims 5 and 10, Brauer further discloses that the laser starts firing on the R wave and stops before the T wave (e.g. See Figs. 5-6; col. 10, lines 15-67; col. 11, lines 1-63).

***Response to Arguments***

Applicant's arguments filed March 24, 2005 have been fully considered but they are not completely persuasive. ***Claims 1-10 are pending.***

Applicant's cooperation in explaining the claims subject matter more specific to overcome the claim rejection is also appreciated.

Applicants' s arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection as discussed above.


*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Binh Tran whose telephone number is (571) 272-4865. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reach on (571) 272-4859. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BT  
June 10, 2005



Binh Q. Tran  
Patent Examiner  
Art Unit 3748